

REMARKS

The Official Action mailed March 9, 2009, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant notes with appreciation the consideration of the Information Disclosure Statements filed on April 13, 2004; and June 11, 2008.

A further Information Disclosure Statement is submitted herewith and consideration of this Information Disclosure Statement is respectfully requested.

Claims 1-130 were pending in the present application prior to the above amendment. Claim 128 has been canceled without prejudice or disclaimer; and claim 7 has been amended to better recite the features of the present invention. Accordingly, claims 1-127, 129 and 130 are now pending in the present application, of which claims 1-7, 100 and 101 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

The Official Action rejects claims 1-61 and 68-130 as obvious based on the combination of JP 11-125841 to Chiyou and U.S. Patent No. 7,196,699 to Kubota. The Applicant notes that JP '841 and U.S. Patent No. 6,243,155 to Zhang (submitted herewith) both claim the benefit of Japanese priority document JP 9-306517. The Applicant respectfully submits that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present application.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some reason, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the

prior art to produce the claimed invention where there is some reason to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

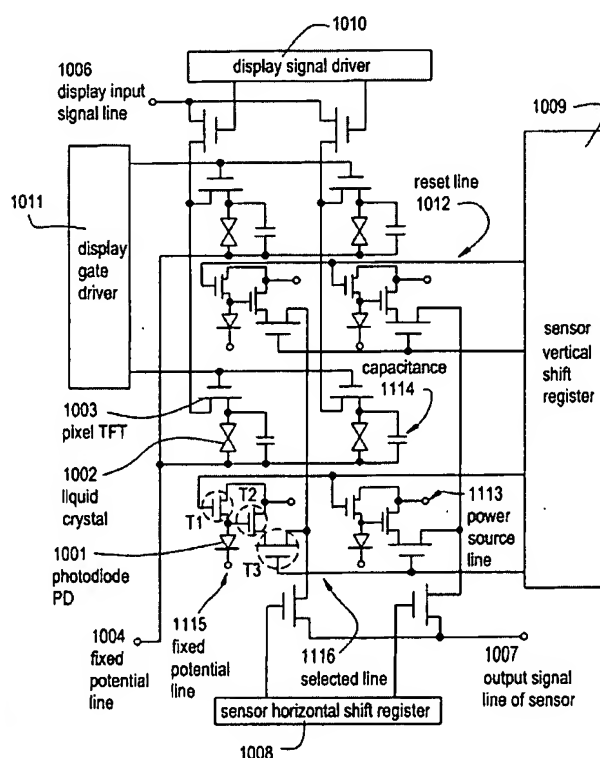
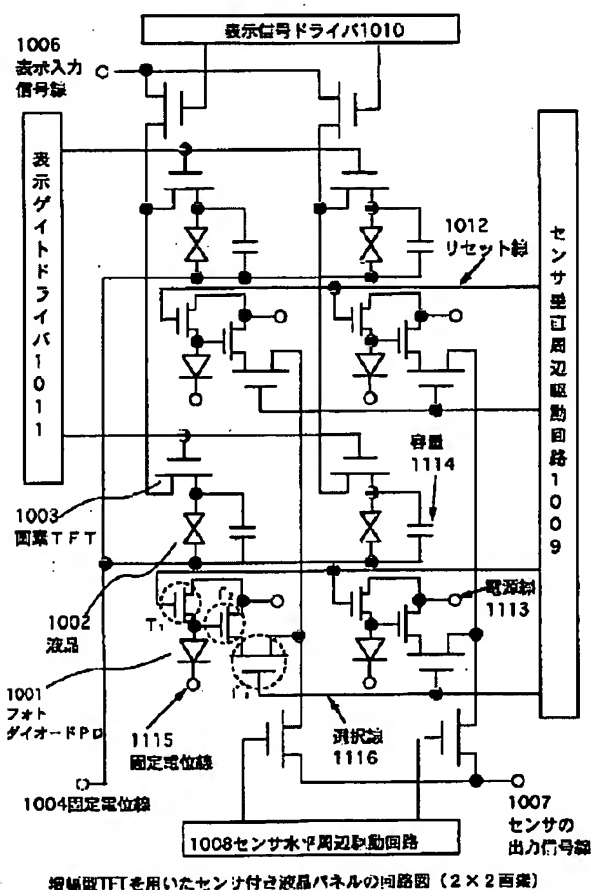
The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims.

Independent claims 1 and 101 recite wherein the second circuit is configured to select either one of the sensor portion and the liquid crystal element portion. Independent claim 100 recites wherein the second circuit is configured to select either one of the sensor portion and the light emitting element portion. Independent claims 2-6 recite a pixel portion comprising a plurality of pixels, wherein each of the plurality of pixels comprises a sensor portion and a light emitting element portion or liquid crystal element portion. Also, claims 2-5 recite wherein the second circuit is so configured that either one of the first logical circuit and the second logical circuit outputs a pulse signal based on the timing signal to the pixel portion; and claim 6 recites wherein the sensor portion comprises a first TFT, and the light emitting element portion comprises a second TFT, and wherein the second circuit is so configured that, when one of the first logical circuit and the second logical circuit outputs a non-selection signal to one of the first TFT and the second TFT, the other of the first logical circuit and the second logical circuit outputs a selection signal based on the timing signal to the other of the first TFT and the second TFT.

Rather than presenting an element-by-element analysis of the features of each of the independent claims, the Official Action attempts to discuss all of claims 1-7 and 100-103 at pages 2-4 in a collective manner without differentiating between the various

independent claims. As such, the record is unclear in that some features of the independent claims are not directly addressed at all or are addressed in a manner that is piecemeal. For example, the Official Action does not directly address "wherein the second circuit is configured to select either one of the sensor portion and the liquid crystal element portion" or "wherein the second circuit is configured to select either one of the sensor portion and the light emitting element portion."

In any event, the Official Action asserts that Chiyou teaches "a sensor portion and a liquid crystal element portion (Chiyou, Fig. 10 elements 1001 and 1002)" (page 2, Paper No. 20081201; Figure 10 of Chiyou is reproduced below at left and Figure 10 of Zhang is reproduced below at right).



That is, the Official Action appears to assert that the photodiode 1001 and the liquid crystal 1002 of Chiyou correspond to the sensor portion and the liquid crystal

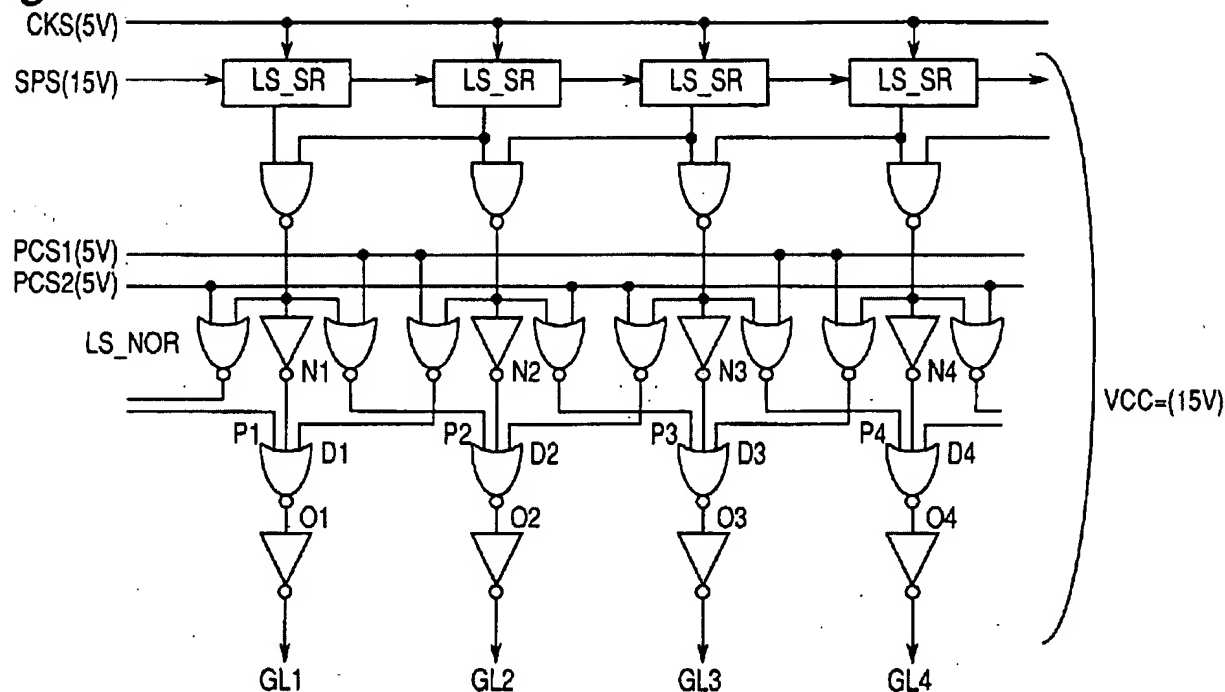
element portion of the present claims, respectively. However, with respect to claims 1, 100 and 101, the Official Action has not demonstrated how Chiyou teaches or suggests that a second circuit is configured to select either one of a sensor portion and a liquid crystal element portion or light emitting element portion.

In fact, the Official Action concedes that “Chiyou fails to teach a second circuit as claimed” (page 4, Paper No. 20081201). Also, the Official Action concedes that “the LCD elements and the photodiode [of Figure 10 of Chiyou] are operated completely independently of each other” (page 3, Id.). Chiyou appears to disclose this feature (see, e.g., column 9, lines 40-42, and column 11, lines 30-33 of Zhang, i.e. “the liquid crystal display element and the sensor element are independent of each other”). The Official Action further asserts that “the second logical circuit 1008-1011 selects them individually” (Id.). However, this assertion does not address the feature of a circuit configured to select either one of a sensor portion and a liquid crystal element portion or light emitting element portion.

In Figure 10 of Chiyou, as conceded in the Official Action, the LCD elements and the photodiode elements are operated completely independently of each other, and Chiyou’s driver circuits and shift registers 1008-1011 are not configured to select either one of a sensor portion and a liquid crystal element portion or light emitting element portion.

Kubota does not cure the above-referenced deficiencies in Chiyou. The Official Action asserts that “Kubota teaches a second circuit located after the shift registers in a display driver which outputs pulses to the display electrodes (Kubota, Fig. 75)” (page 4, Id.; Figure 75 reproduced below).

Fig.75



However, Kubota does not teach or suggest that a second circuit is configured to select either one of a sensor portion and a liquid crystal element portion or light emitting element portion or that Chiyou could or should be modified to include such features.

With respect to claims 2-6, since Chiyou's LCD elements and the photodiode elements are operated completely independently of each other, Chiyou and Kubota do not teach or suggest that a second circuit is so configured that either one of a first logical circuit and a second logical circuit outputs a pulse signal based on a timing signal to a pixel portion (comprising a plurality of pixels, wherein each of the plurality of pixels comprises a sensor portion and a light emitting element portion or a liquid crystal element portion); or that a second circuit is so configured that, when one of a first logical circuit and a second logical circuit outputs a non-selection signal to one of a first TFT (part of the sensor portion) and a second TFT (part of the light emitting element portion), the other of the first logical circuit and the second logical circuit outputs a selection signal based on a timing signal to the other of the first TFT and the second TFT.

Independent claim 7 has been amended to recite a first circuit comprising a shift register; wherein the first circuit is configured to output a timing signal based on an output signal of the shift register to the first logical circuit and to the second logical circuit. The Official Action asserts that Chiyou discloses that “the first circuit comprises a first logical circuit and a second logical circuit (Chiyou, Fig. 10 elements 1009 and 1011); ... wherein the first circuit is configured to output a timing signal to the first logical circuit and the second logical circuit” (pages 2-3, Paper No. 20081201). However, in Figure 10 of Chiyou, even if one were to assert that the sensor vertical shift register 1009 was a first logical circuit and that the display gate driver 1011 was a second logical circuit, as conceded in the Official Action, register 1009 and driver 1011 are operated completely independently of each other. Therefore, Chiyou and Kubota, either alone or in combination, do not teach or suggest a timing signal based on an output signal of a shift register supplied to both the sensor vertical shift register 1009 and the display gate driver 1011.

Therefore, the Applicant respectfully submits that Chiyou and Kubota, either alone or in combination, do not teach or suggest the above-referenced features of the independent claims.

Since Chiyou and Kubota do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

The Official Action rejects dependent claims 62-67 as obvious based on the combination of Chiyou, Zhang and U.S. Patent No. 6,246,180. Please incorporate the arguments above with respect to the deficiencies in Chiyou and Zhang. Nishigaki does not cure the deficiencies in Chiyou and Zhang. The Official Action relies on Nishigaki to allegedly teach the features of the dependent claims. Specifically, the Official Action relies on Nishigaki to allegedly teach “an LED type matrix display which uses a selection TFT, a driver TFT and a reset TFT in order to drive the LED” (pages 6-7, Paper No.

20081201). However, Chiyou, Zhang and Nishigaki, either alone or in combination, do not teach or suggest that Chiyou and Zhang should be modified to include the above-referenced features of the independent claims. Since Chiyou, Zhang and Nishigaki do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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